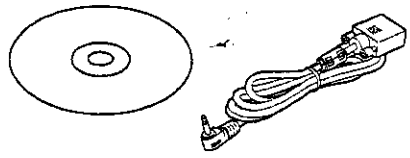
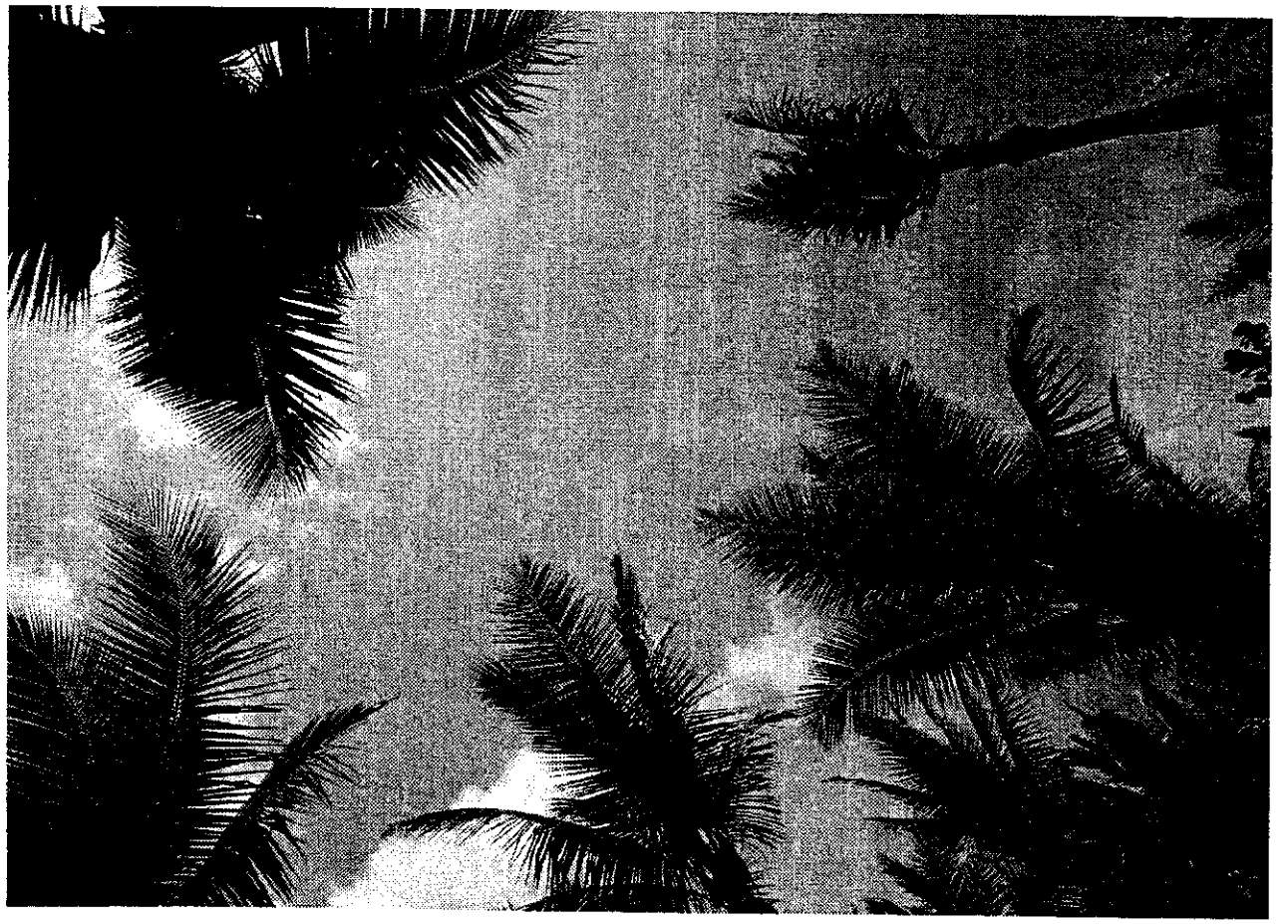
Panasonic

Personal Computer
Connection Kit

Operating Instructions





For Windows® 95/98

(Already confirmed to operate correctly on Windows® Me)

Before use, please read these instructions completely.

VQT0865

Please read this before opening the package!

You may use the software (DV STUDIO) included in the Personal Computer Connection Kit only on condition that you agree to the terms and conditions of the DV STUDIO License Agreement. Therefore, before opening the disk package enclosed with the Personal Computer Connection Kit, please take the time to read the DV STUDIO License Agreement carefully. The opening of the disk package shall be deemed to constitute your acceptance of the terms and conditions of this license agreement.

DV STUDIO License Agreement

1) **Rights**
   - Panasonic hereby grants you, the end user, the right and license to use DV STUDIO (specifically, all the information relating to DV STUDIO either recorded on the disk or printed in the accompanying manual) in accordance with the terms and conditions outlined below. This does not constitute a transfer to you of the copyrights which will remain with Panasonic.
2) **Use by third parties**
   - You may not transfer, distribute, rent, lease or assign the use of DV STUDIO or copies thereof to any third party whether with or without compensation therefor.
3) **Copying limits**
   - You may make one (1) copy of DV STUDIO in machine-readable from for back-up purposes only (in support of the use of the DV STUDIO). You must display the same copyright notice, which is indicated on DV STUDIO, on the copy of DV STUDIO which you have made.
4) **Computers used**
   - DV STUDIO may be used on one (1) computer only. It may not be used on other computers.
5) **Analysis, modifications and remodelling**
   - You shall not analyze, modify or remodel DV STUDIO or have such analysis, modification or remodeling conducted by any third party. Panasonic, its subsidiary companies, its sales agents and its dealers are not liable for any defects in DV STUDIO or damage sustained by the end user resulting from these said actions.
6) **Networks**
   - DV STUDIO may not be used on networks or transferred to other computers over networks.
7) **Exemption from liability**
   - Panasonic, its subsidiary companies, its sales agents and its dealers offer no guarantees whatsoever in connection with DV STUDIO. They will not be held liable for any damage resulting from the use of DV STUDIO or claims made on you by third parties concerning its use.
8) **Termination of License**
   - The license to use DV STUDIO will be automatically terminated if you contravene any of the abovementioned terms and conditions of use. In this event, you must destroy DV STUDIO and related documentation together with all the copies thereof at your own expense.

For ArcSoft PhotoImpression, refer to the Software License Agreement which appears on the setup screen.

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WARNING:

To reduce the risk of fire or shock hazard, do not expose this equipment to rain or moisture.

CAUTION:

To reduce the risk of fire or shock hazard and annoying interference, use the recommended accessories only.

PREPARATIONS

Introduction

This Personal Computer Connection Kit lets you connect your personal computer to a movie camera that has a digital still picture terminal. You can use the kit to transfer high-quality video images shot with your movie camera to your personal computer.

This Personal Computer Connection Kit comes with the "DV STUDIO 2" programme which ties in the movie camera.

Only a PAL movie camera can be used with the "DV STUDIO 2" programme which comes with this Personal Computer Connection Kit.

Notes on these instructions

The names of the products you are using may differ from the names given in the text. Depending on the operating environment and other factors, the contents of the screens used in these instructions may not necessarily match what you will see on your screen.

These instructions do not cover the basic operations of the personal computer or define any terms. For this information, refer to the Operating Instructions which accompany your personal computer.

Microsoft Windows is a trademark of Microsoft Corporation in the United States.

All other names, company names, product names, etc. in these instructions are the trademarks or registered trademarks of their respective corporations.

NV-DS37/38B only

Panasonic

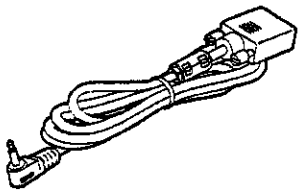
Customer Care Hot Line
"DV STUDIO 2"
0870 1 505610

Before operating this product, please ensure thet you read the operating instruction completely.

If you require further assistance regarding the operation, or if the product requires repair, then p;ease contact our Customer Care Hot Line by telephone between 9.00am to 5.30pm Monday to Friday.

This Hot Line number is for UK customers relating to this product only. For other product categories, please contact your selling dealer for assistance.

please retain for future reference.



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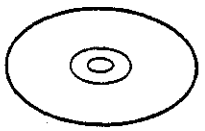


VFF0079(NV-DS37/38B)
VFF0105(NV-DS28/38A)

Names and functions of packaged items

1) **Interface Cable (4 - 9 pins)**
   - This Interface Cable is used to connect a personal computer with a movie camera.
2) **CD-ROM:**
   DV STUDIO 2,
   ArcSoft PhotoImpression™ 2000 (→ 18) (NV-DS28/38A only)
   DV STUDIO 2 for Acquisition enables you to :
   - Acquire digital still pictures.
   - Operate (playback, fast forward, rewind, etc.) the movie camera from your personal computer.
   - Find places on the tape where the acquired pictures have been recorded, cue them up and play them.
   - Save the acquired pictures in JPEG or BMP format. (Saved pictures can be used on the personal computer.)

Operating environment

DV STUDIO 2 can be installed in a PC/AT compatible personal computer which can run Microsoft® Windows® 95/98. (Already confirmed to operate correctly on Windows® Me)

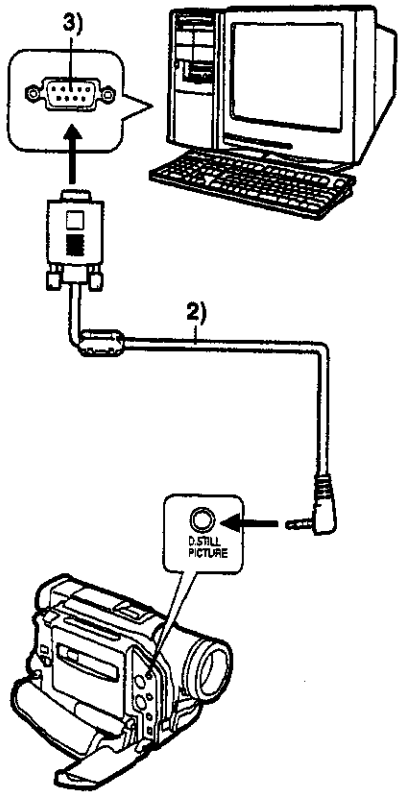
Compatible machines:
Personal computer with 80486DX4 or higher CPU (Pentium™ or higher recommended)
Graphic card:
True Colour (approx. 16.7 million colours) recommended (operation also possible even with 256 colours)
Installed memory:
16 MB or more (32 MB or more recommended)
Free hard disk space:
At least 16 MB
Disk drive:
CD-ROM drive
Ports:
RS-232C (D-sub 9-pin)
Other requirements:
Mouse

See page 18 regarding the ArcSoft PhotoImpression 2000. (NV-DS28/38A only)

Connections

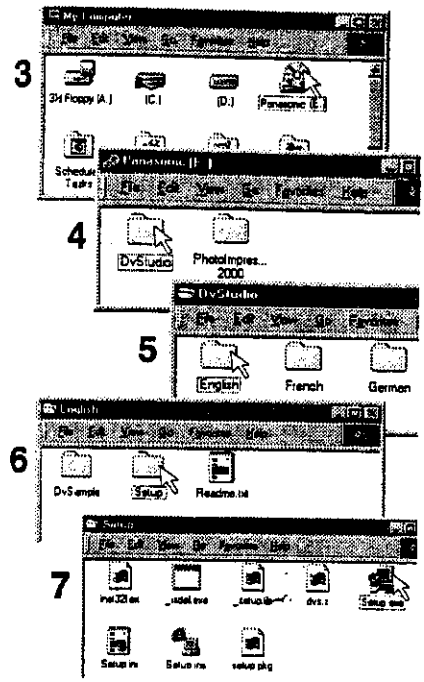
Your movie camera can be connected to a personal computer with a serial port (D-sub 9-pin RS-232C connector).
Before making these connections, turn off all of the devices which are to be connected.

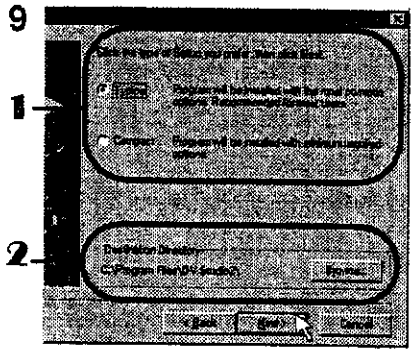
- Also carefully read the Operating Instructions provided with your personal computer, movie camera and other connected devices.

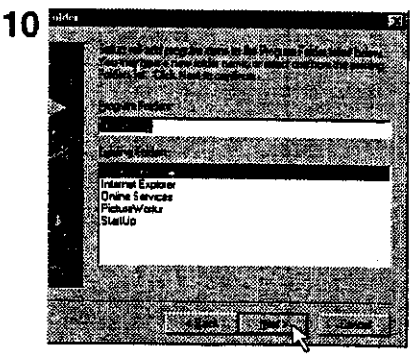


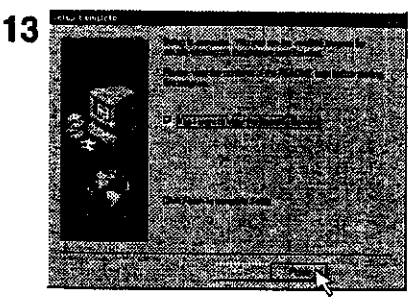
1) Movie camera
2) Interface Cable (4-9 pins: supplied)
3) Serial port (D-sub 9-pin RS-232C connector)
4) Personal computer (not supplied)

- Use the Interface Cable supplied.
- After making the connections, turn the connected equipment on.
- When using the Personal Computer Connection Kit, use of the AC Adaptor is recommended for the power supply of the movie camera.
- Connecting the movie camera to a TV monitor, etc. is a convenient way of checking out the playback pictures. These pictures can also be displayed on the personal computer monitor if the computer has a video input connector equipped with a capture board (with overlay function).
- Do not disconnect the Interface Cable while DV STUDIO 2 is being used. The software programme may not run properly or data being transferred may be lost as a result.









Installing DV STUDIO 2

In order for DV STUDIO 2 to be installed, the hard disk must have at least 16 MB of free space. Before proceeding with installation, check out the amount of free space on the hard disk.

1 Insert the DV STUDIO 2 CD-ROM into the personal computer's CD-ROM drive.

2 Double-click [My Computer].

- The [My Computer] folder is now opened.

3 Double click the CD-ROM icon.

4 Double-click the [DvStudio] folder.

- The [DvStudio] folder is now opened.

5 Double-click the folder corresponding to the language version of the programme you wish to install.

6 Double-click the [Setup] folder.

- The [Setup] icon now appears.

7 Double-click the [Setup] icon.

- DV STUDIO 2 setup (installation) now begins. The setup screen appears. Read the screen messages carefully, and proceed with installation.

8 After reading the messages, click [Next].

9 After making the selections presented in 1 and 2, click [Next].

1 Selecting the type of installation

- If [Typical] is selected, the DV STUDIO 2 and sample files will be installed.
- If [Compact] is selected, only the DV STUDIO 2 will be installed.
- No matter which type is selected, the [Readme] file will be installed.

2 Select the directory in which [DV STUDIO 2] is to be installed.

- The default selection is: C:\Program Files\DV Studio2\. Normally, the default setting is retained, and the [Next] button is clicked to move on to the next step. To install DV STUDIO 2 in a different directory, click [Browse].

10 Create a programme folder (or select an existing folder), and click [Next].

11 Check what has been selected in the steps so far, and click [Next].

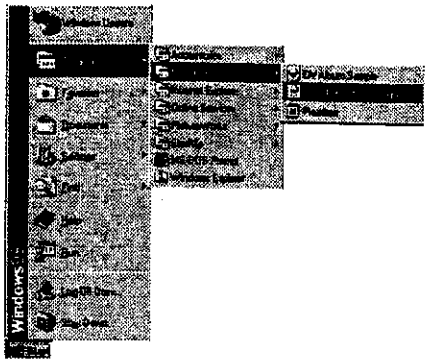
- To make a change to a selection, click [Back] button, and make the change.

12 Installation now begins.

- Click [Cancel] to stop the installation.

13 Upon completion of the installation, click [Finish].

- The [Readme] file now appears.
- To use DV STUDIO 2 immediately without reading the [Readme] file, remove the check mark, and click [Finish].

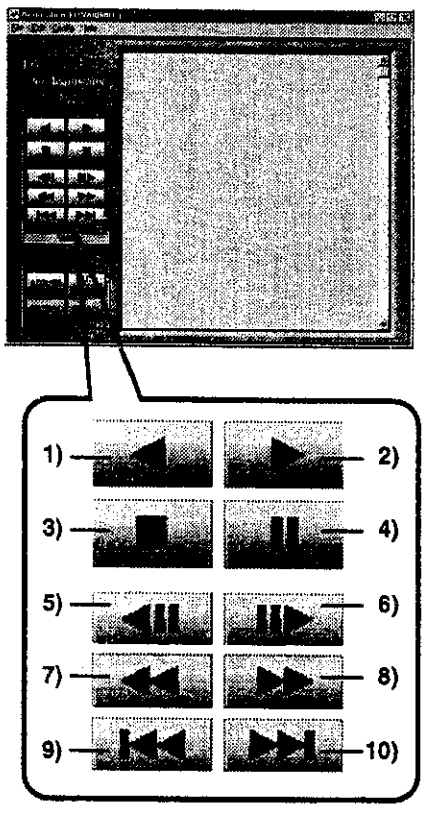


USING DV STUDIO 2 for acquisition

Starting DV STUDIO 2 for Acquisition

The startup method differs depending on the type of personal computer used. The normal procedure is to turn on all connected equipment, then select [Programs] → [DV Studio2] → [DV STUDIO2 for Acquisition] from the [Start] menu.

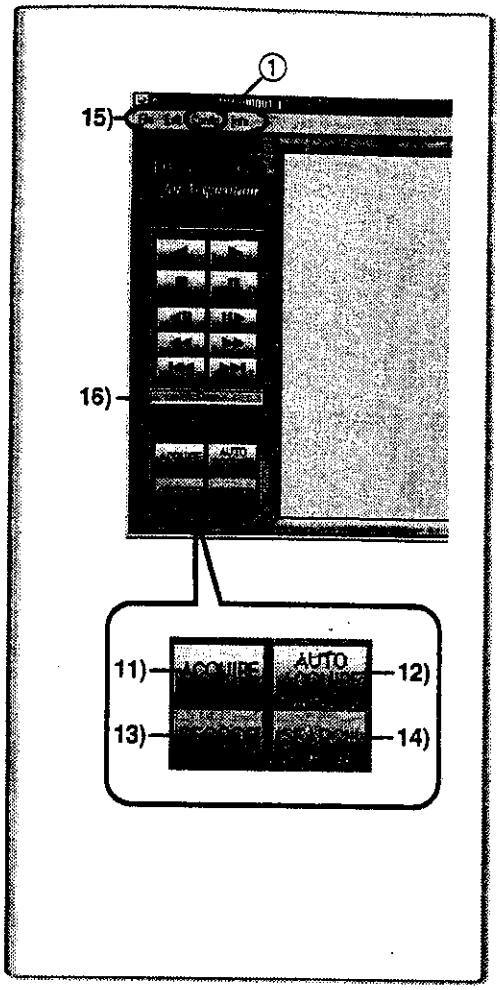
(Communications may sometimes be interrupted by the operations of the OS or other software that is running simultaneously. If this should happen, reconnect after the other operation is complete. (➔ 17))



Parts and their functions with movie camera in VCR Mode

Functions not available with connected equipment or incompatible functions cannot be used.

1) **Reverse playback [◀]**
   - Used to reverse play back the movie camera's tape.
2) **Playback [▶]**
   - Used to play back the movie camera's tape.
3) **Stop [■]**
   - Used to stop the movie camera's tape.
4) **Still [❚❚]**
   - Used to temporarily stop the playback of the movie camera's tape and play back still pictures. The same operation is performed by the short cut key [↑].
5) **Reverse still advance [◀❚❚]**
   - Used to reverse the frames when the playback of the movie camera's tape has been temporarily stopped.
6) **Still advance [❚❚▶]**
   - Used to forward the frames when the playback of the movie camera's tape has been temporarily stopped.
7) **Rewind [◀◀]**
   - Used to rewind the movie camera's tape. Review playback results when this button is clicked during playback.
8) **Fast forward [▶▶]**
   - Used to fast forward the movie camera's tape. Cue playback results when this button is clicked during playback.
9) **Reverse photo search [|◀◀]**
   - Used to search for still images shot by Photoshot on the movie camera's tape in the reverse direction.
10) **Forward photo search [▶▶|]**
    - Used to search for still images shot by Photoshot on the movie camera's tape in the forward direction.



11) Acquire [ACQUIRE]

- Used to acquire a still picture. Setting the acquisition method is performed with [Acquire Format] (➜ 16) in [Config] ① on the menu bar.
- The same operation is performed by the short cut key [↓].

12) Auto acquire [AUTO ACQUIRE]

- Used to acquire a still picture automatically. Setting the auto acquisition method is performed with [Auto Acquire Settings] (➜ 17) in [Config] ① on the menu bar.
- The method set with [Acquire Format] in [Config] ① is used for the picture acquisition format.

13) Decode [DECODE]

- Used to decode the acquired pictures. When fast preview mode data is selected for decoding, the position on the tape where the original picture was recorded is searched, the full acquire mode data is acquired, and then the acquired picture is decoded. In this case, tape or Card containing the recording of the selected fast preview mode data must be loaded in the movie camera. You can decode a picture simply by double-clicking on it.
- When decoding a picture that was acquired in Fast Preview Mode, make sure that there are no interruptions in the tape, and make sure that you have loaded the correct tape.

14) Search [SEARCH]

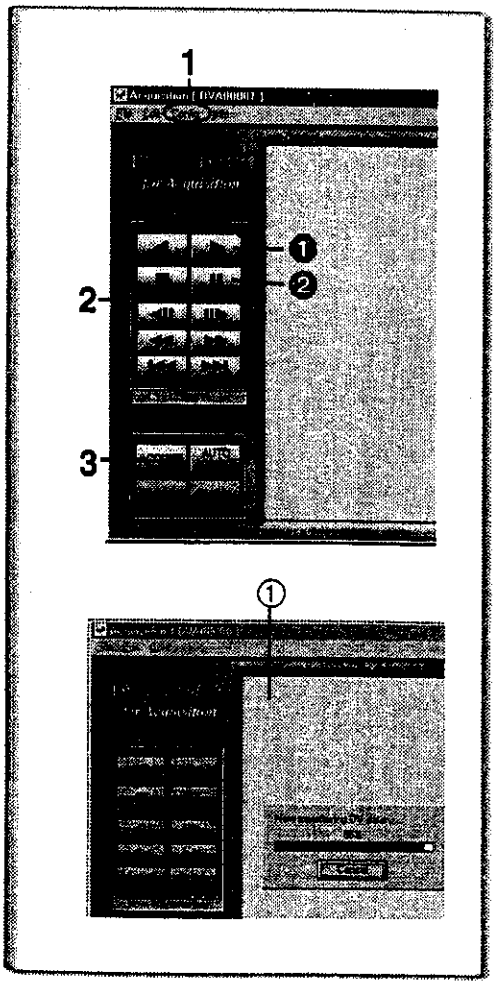
- Used to search the data selected on the picture display. (Playback begins after searching when in the VCR Mode.)

15) Menu bar

- A variety of functions, such as data saving and configuration, are arranged by type in the menu bar. (➜ 16)

16) Movie camera status

- The status of the connected movie camera is displayed here.



Acquiring still playback pictures to create a DV album

Use the procedure described below to search through pictures recorded on tape in a movie camera and acquire desired pictures as still pictures on your personal computer. Insert the tape containing the desired pictures in your movie camera, then connect your movie camera and personal computer (➜ 4). Next, set the movie camera to VCR (Playback) Mode and open the application.

1 Select the desired acquisition format under [Acquire Format] (➜ 16) in [Config].

- Select [Full Acquire Mode] or [Fast Preview Mode].

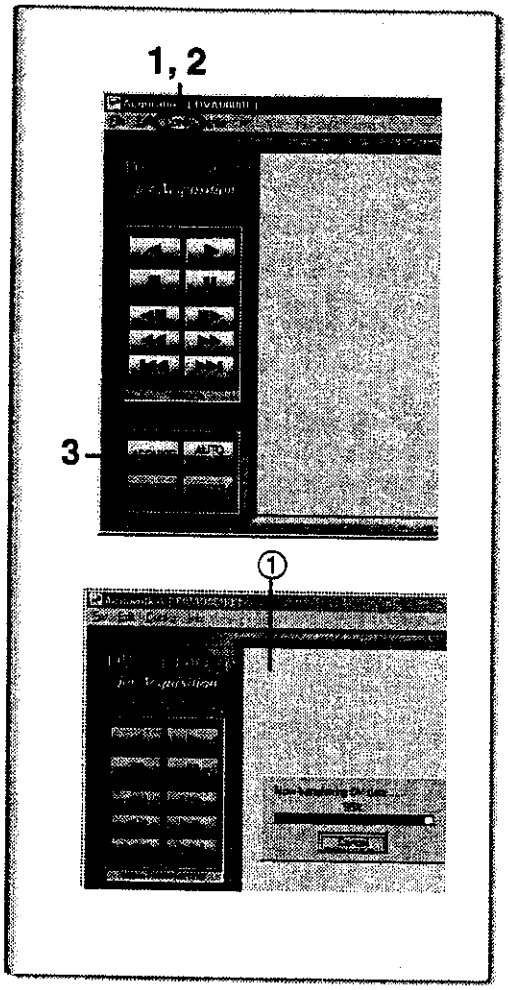
2 Use the movie camera control buttons to find the picture to be acquired and begin with still playback.

- Click [▶] ❶ to play back the movie camera's tape, and click [❚❚] ❷ when the part of the tape with the picture to be acquired is reached.

3 Click [ACQUIRE].

- Picture acquisition now starts. When acquisition is completed, the acquired picture appears on the picture display ①.
- Acquiring a picture takes some time.

- To cancel an acquisition, click [Cancel].
- Due to the possibility of an incorrect operation, do not operate the movie camera directly when the acquire button has been operated at the DV STUDIO 2 end.
- Before acquiring a picture, be sure to click [❚❚] to make the picture stand still. Otherwise, the picture may not be acquired correctly.
- When acquiring a picture that contains a playback digital effect, some models may not be able to acquire the digital effect.



Automatically acquiring still playback pictures to create a DV album

Use the procedure described below to set pictures recorded on tape in a movie camera as still pictures and have your personal computer acquire them automatically. Insert the tape containing the desired pictures in your movie camera, then connect your movie camera and personal computer (➔ 4). Next, set the movie camera to VCR (Playback) Mode and open the application.

1 **Select the desired acquisition format under [Acquire Format] (➔ 16) in [Config].**

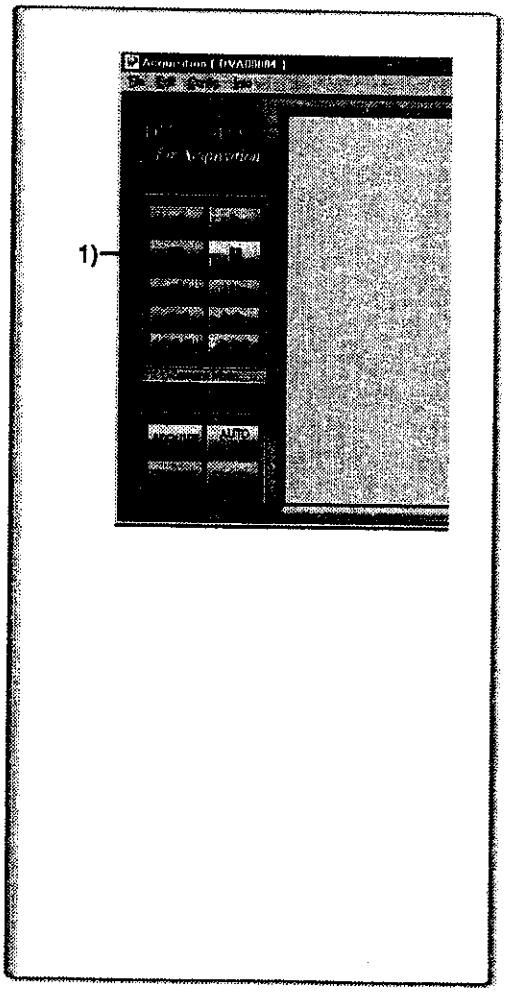
2 **Select the acquisition method under [Auto Acquire Settings] (➔ 17) in [Config].**

- There are two methods of acquiring pictures automatically: Photoshot and Interval Time. Select one of these methods. Also select the position on the tape where acquisition is to start. (There is a slight error in the Interval Time.)

3 **Click [AUTO ACQUIRE].**

- Picture acquisition now starts. When acquisition is completed, the acquired pictures appear in sequence on the picture display ①.
- Acquiring a picture takes some time.

- To stop auto acquire, click [Cancel].
- Due to the possibility of an incorrect operation, do not operate the movie camera directly when the acquire button has been operated at the DV STUDIO 2 end.
- There may be some small amount of error in the interval time.
- It is sometimes not possible to acquire the picture in the first photo.
- When acquiring a picture that contains a playback digital effect, some models may not be able to acquire the digital effect.



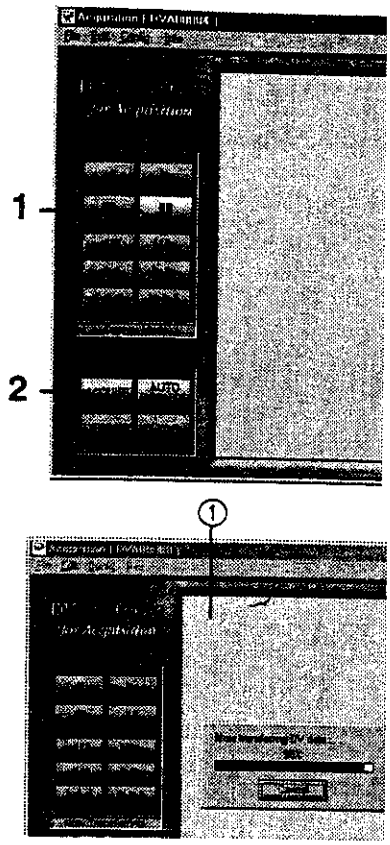
Parts and their functions with movie camera in Camera Mode

When the movie camera is in Camera Mode, only the buttons that can actually be used are active. For information on functions not described here, see "Parts and their functions with movie camera in VCR Mode" (➔ 6). Functions not available with connected equipment or incompatible functions cannot be used.

- In this mode, operate the Movie Camera without a cassette inserted. Otherwise it automatically switches off to protect the tape and to conserve battery power.
- In this mode, keep the Demo Mode of the movie camera to OFF.
- The following buttons operate in a different way from the actual buttons of the movie camera.

1) **Still [▮▮]**

- The button is used to capture camera video as a still picture, or to release a still picture.



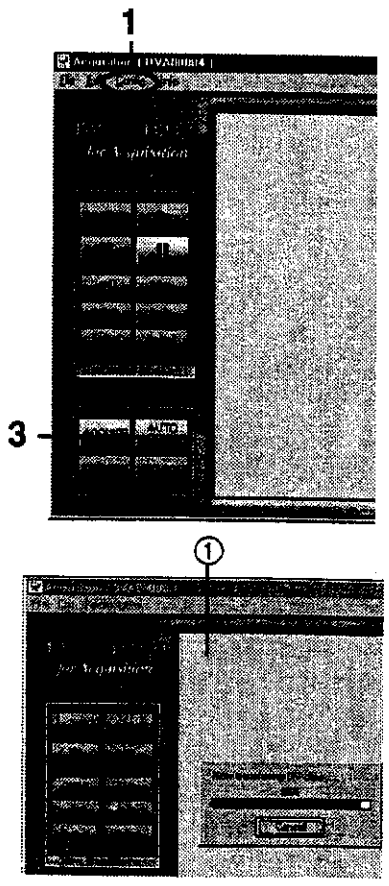
Acquiring digital still pictures in Camera Mode to create a DV album

Use the procedure described below to acquire Camera Mode video from your movie camera as still pictures. Connect your movie camera and personal computer (➔ 4). Next, set the movie camera to Camera Mode and open the application.

1 Point the movie camera at the desired object and press [❚❚].
- The picture is captured as a still picture. Press the button again to release the still picture.

2 Click [ACQUIRE].
- Picture acquisition now starts. When acquisition is completed, the acquired picture appears on the picture display ①.
- Acquiring a picture takes some time.

- To cancel an acquisition, click [Cancel].
- Due to the possibility of an incorrect operation, do not operate the movie camera directly when the acquire button has been operated at the DV STUDIO 2 end.
- If the movie camera's Progressive Photoshot Function is set to AUTO, the picture without the Progressive Photoshot effect is acquired.
- Before acquiring a picture, be sure to click [❚❚] to make the picture stand still. Otherwise, the picture may not be acquired correctly.



Automatically acquiring digital still pictures in Camera Mode to create a DV album

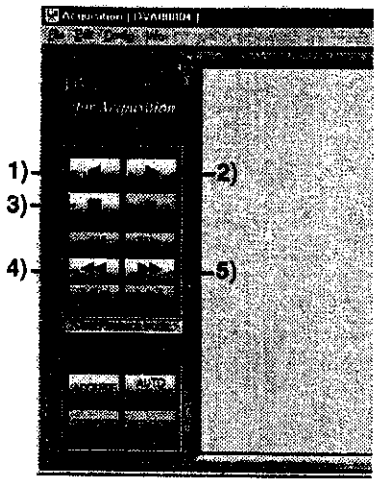
Use the procedure described below to automatically acquire Camera Mode video from your movie camera as still pictures. Connect your movie camera and personal computer (➔ 4). Next, set the movie camera to Camera Mode and open the application.

1 Select the acquisition method under [Auto Acquire Settings] (➔ 17) in [Config].
- Select the acquisition interval under "Interval Time" (There is a slight error in the Interval Time.)

2 Point the movie camera at the desired object.

3 Click [AUTO ACQUIRE].
- Picture acquisition now starts. Still pictures are acquired at the selected time intervals, and the acquired pictures appear in sequence on the picture display ①.
- Aquiring a picture takes some time.

- To stop auto acquire, click [Cancel].
- Due to the possibility of an incorrect operation, do not operate the movie camera directly when the acquire button has been operated at the DV STUDIO 2 end.

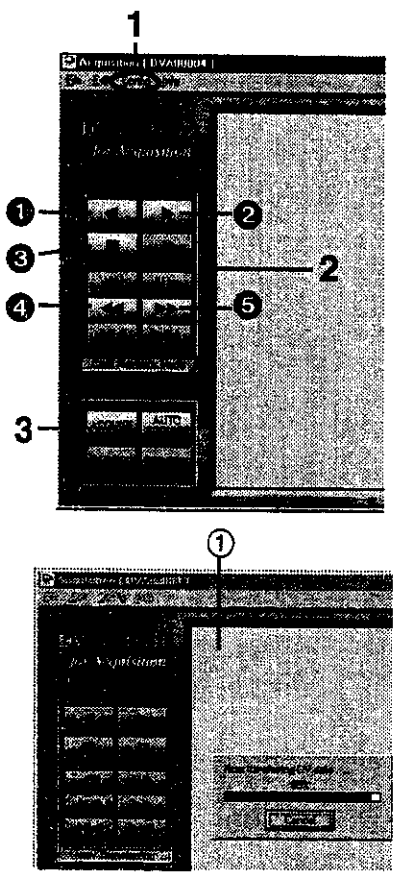


Parts and their functions with movie camera in Card Playback Mode

When the movie camera is in Card Playback Mode, only the buttons that can actually be used are active. For information on functions not described here, see "Parts and their functions with movie camera in VCR Mode" (➔ 6). Functions not available with connected equipment or incompatible functions cannot be used.

- The following buttons operate in a different way from the actual buttons of the movie camera.

1) **Back [◀]**
   - Each time the button is pressed, the preceding memory screen is displayed.
2) **Forward [▶]**
   - Each time the button is pressed, the next memory screen is displayed.
3) **Multi-picture display [■]**
   - The memory screens are displayed in a multi-picture display. (When the button is pressed again, the multi-picture display will be cancelled.)
4) **Back (multi-picture display) [◀◀]**
   - Each time the button is pressed, the preceding multi-picture screen is displayed.
5) **Forward (multi-picture display) [▶▶]**
   - Each time the button is pressed, the next multi-picture screen is displayed.



Acquiring Card Photoshot pictures to create a DV album

Use the procedure described below to acquire still pictures saved on a Card. Insert the Card containing the desired pictures in your movie camera, then connect your movie camera and personal computer (➔ 4). Next, set the movie camera to Card Playback Mode and open the application.

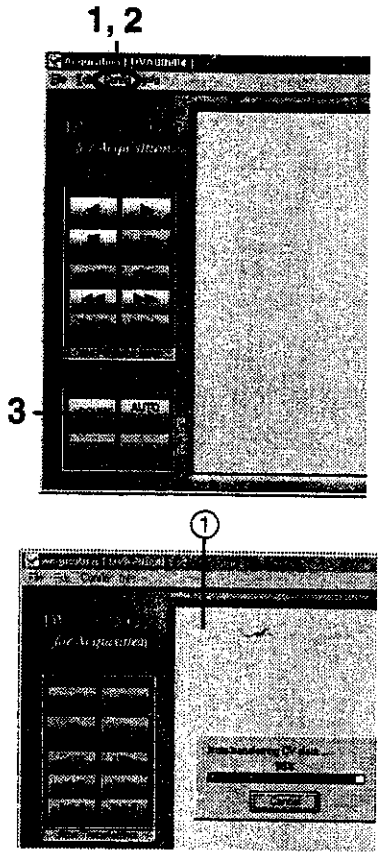
- If operation cannot be performed, check whether the Card has been properly inserted into the movie camera.

1 Select the desired acquisition format under [Acquire Format] (➔ 16) in [Config].
- Select [Full Acquire Mode] or [Fast Preview Mode].

2 Use the movie camera control buttons to find the desired picture.
- Press [◀] ❶ or [▶] ❷ to view the pictures one at a time. If the memory card contains a large number of pictures, press [■] ❸ to switch to a multi-picture screen. You can then press [◀◀] ❹ or [▶▶] ❺ to view nine pictures at a time.

3 Click [ACQUIRE].
- Picture acquisition now starts. When acquisition is completed, the acquired picture appears on the picture display ①.
- Acquiring a picture takes some time.

- To cancel an acquisition, click [Cancel].
- Due to the possibility of an incorrect operation, do not operate the movie camera directly when the acquire button has been operated at the DV STUDIO 2 end.
- Pictures cannot be acquired during slide playback.



Automatically acquiring Card Photoshot pictures to create a DV album

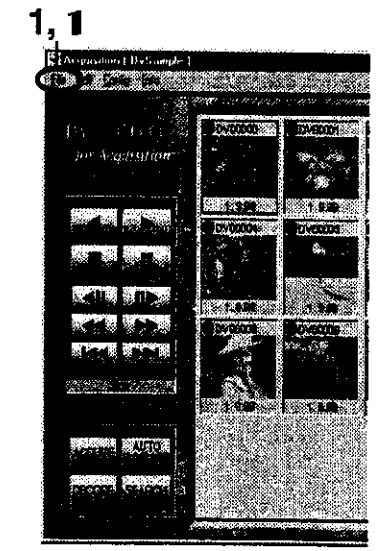
Use the procedure described below to automatically acquire still pictures saved on a Card. Insert the Card containing the desired pictures in your movie camera, then connect your movie camera and personal computer (➔ 4). Next, set the movie camera to Card Playback Mode and open the application.

1 **Select the desired acquisition format under [Acquire Format] (➔ 16) in [Config].**
- Select [Full Acquire Mode] or [Fast Preview Mode].

2 **Select the acquisition method under [Auto Acquire Settings] (➔ 17) in [Config].**
- Select [From here] or [From Start Card].

3 **Click [AUTO ACQUIRE].**
- Picture acquisition now starts. When acquisition is completed, the acquired pictures appear in sequence on the picture display ①.
- Acquiring a picture takes some time.

- To stop auto acquire, click [Cancel].
- Due to the possibility of an incorrect operation, do not operate the movie camera directly when the acquire button has been operated at the DV STUDIO 2 end.
- After you have finished acquiring pictures, an error message appears. Check that the still pictures have actually been acquired.
- Pictures cannot be acquired during slide playback.



Saving a DV album

Use the procedure described below to save a created DV album under a specified name.

1 **Select [Save DV Album] (➔ 16) from [File].**
- The first time you save an album, a dialogue box is displayed, prompting you to enter the album name and file path. If an album has already been saved, however, it will be resaved when you select [Save DV Album].

2 **Enter an album name and file path, then click [OK].**
- The album is saved.

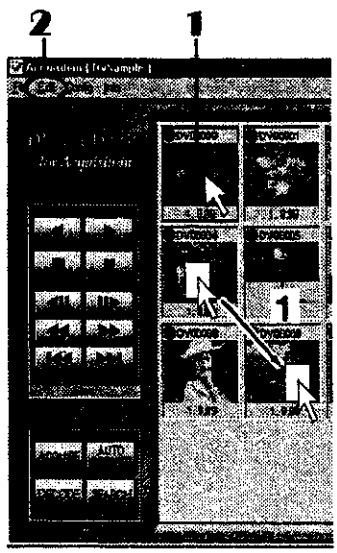
Opening a saved DV album

Once an album is saved, you can open it at any time.

1 **Select [Open DV Album] (➔ 16) from [File].**
- A dialogue box is displayed, prompting you to specify which album to open.

2 **Specify the desired album and click [OPEN].**
- The album is opened.

- You can use [Open DV File] (➔ 16) from the [File] menu to add pictures that were deleted from an album or other pictures. (Only DV format files (*.dvf) can be added.)
- To operate the movie camera using a file loaded in the personal computer, set the movie camera to the same mode as the one in which pictures are acquired.



Editing a DV album

Pictures in a DV album can be edited in a variety of ways. You can move them, delete them, save them, or change their names.

Moving a picture

1 Move the desired picture by dragging and dropping it with the mouse.

- You can move a picture easily by dropping it on top of another picture in the album. The pictures in the album are shifted one place each to fill the blank space from which you moved the picture.

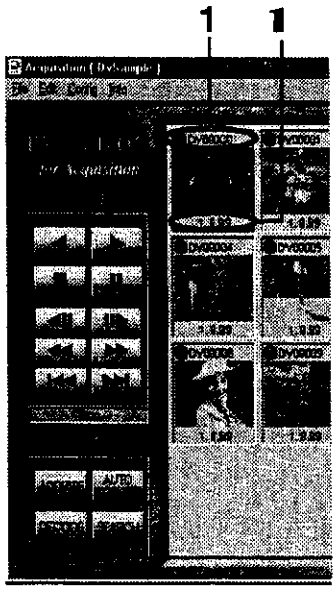
Deleting a picture

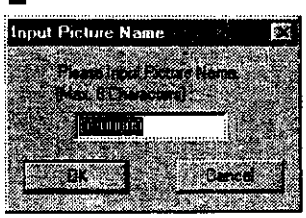
1 Click the picture you want to delete.

- The selected picture is enclosed in a blue border. To select two or more pictures in no particular order, hold down the [Ctrl] key as you select the pictures. To select a continuous range of pictures, hold down the [Shift] key as you select the beginning and end of the range. To select all of the pictures in an album, choose [Select All] from [Edit].

2 Select [Delete] (→ 16) from [Edit].

- The selected pictures are deleted. To restore deleted pictures, select [Undo] from [Edit]. This undoes the immediately preceding action.





Changing the name of a picture

1 Click the title area of the desired picture.

- The [Input Picture Name] dialogue box appears.

2 Enter a name and click [OK].

- Picture names can be as long as 8 characters.

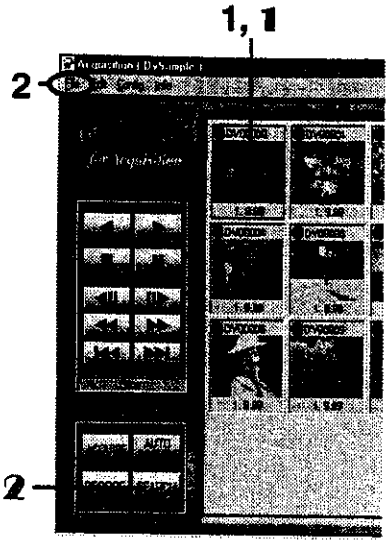
- These are not the file names; these are the names that appear in the DV album.

Toggling between date and time displays

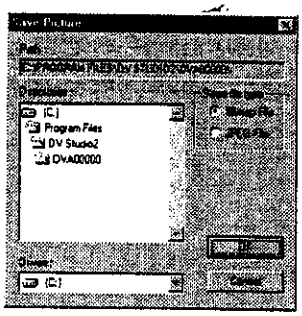
1 Click the date/time area on the desired picture.

- Each time you click this area, the display toggles between the date and the time. (The date and time are the date and time at which the picture was taken.)

- All operations such as deleting files, changing file names, and moving folders should be done through this software. Otherwise, pictures may no longer be properly registered in the DV album.



3



Saving DV album pictures in a different format

You can save DV album pictures in a different format. To save a picture acquired in [Fast Preview Mode], first insert the tape or Card containing the picture in the movie camera. Then set the movie camera to VCR Mode or Card Playback Mode.

1 **Click the desired picture.**
- The selected picture is enclosed in a blue border. To select two or more pictures in no particular order, hold down the [Ctrl] key as you select the pictures. To select a continuous range of pictures, hold down the [Shift] key as you select the beginning and end of the range. To select all of the pictures in an album, choose [Select All] from [Edit].

2 **Select [Save Picture] (→ 16) from [File].**
- A dialogue box appears.

3 **Enter the file path and file format, then click [OK].**
- The picture is saved. Pictures acquired in [Fast Preview Mode] are first reacquired in [Full Acquire Mode] and then saved.

- Pictures may be saved as bitmap or JPEG files. If [JPEG File] is selected, a dialogue box appears, prompting you to specify the image quality. Specify a image quality and click [OK].

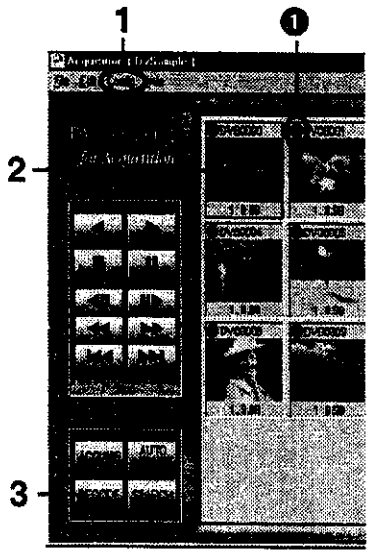
Searching for pictures in a DV album

Use the procedure described below to search for the position on a movie camera tape or Card where a picture was acquired. Insert the tape or Card containing the desired picture in the movie camera. Then set the movie Camera to VCR Mode or Card Playback Mode. (This function is useful because it allows you to use a DV album as a table of contents for the tape or Card in a movie camera).

1 **Click the picture you want to find.**
- The selected picture is enclosed in a blue border.Please select just one picture. It is not possible to search for more than one picture at the same time.

2 **Click [SEARCH].**
- The position of the picture is found. (Playback begins after searching when in the VCR Mode.)

- To cancel the search operation, click [Cancel].
- The search function will not work for 5 seconds when the tape begins to travel from its start end.
- The search function will not work properly if the tape contains unrecorded sections.
- The search function will not work properly if the Card is used in a different status from the one in which pictures are acquired.



Decoding the display of a DV album picture

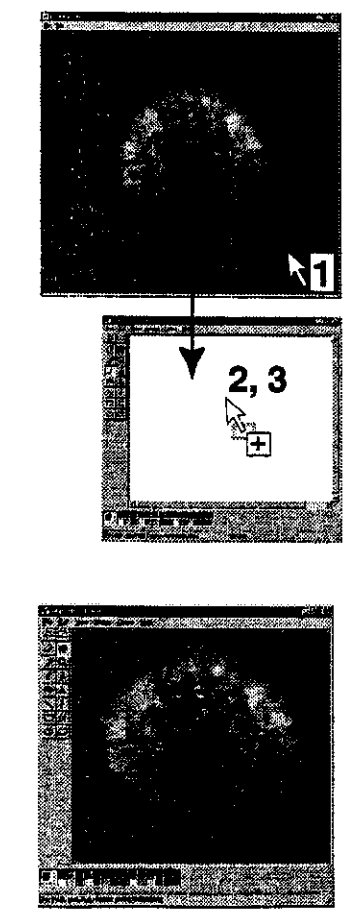
DV album pictures can be decoded and displayed. To decode a picture acquired in [Fast Preview Mode], insert the tape or Card containing the picture in the movie camera. Then set the movie camera to VCR Mode or Card Playback Mode.

1 **Select [Retouch Application] from [Config].**
- A dialogue box appears. Select the application in which you want to display the decoded picture. (➔ 17)

2 **Click the picture you want to decode.**

3 **Click [DECODE].**
- The picture is decoded and displayed. Pictures acquired in [Fast Preview Mode] are first reacquired in [Full Acquire Mode] and then decoded and displayed.

- A picture can also be decoded by double-clicking it.
- If a decoded picture is displayed in a software programme other than this programme, the picture will be automatically saved in a folder called "Object" which is at the level where the DV album is saved. This data remains even after closing the picture, so delete any data that is not needed.
- See "Decoded Picture Menus" (➔ 17) for information on the menus appearing when a decoded picture is displayed using this software programme.
- Whether the picture has been decoded in the fast preview mode or full acquire mode can be identified by the acquisition format mark ❶. A white circle indicates that the picture has been acquired in fast preview mode; a red circle indicates the full acquire mode.



Moving a decoded picture to another software programme by dragging and dropping

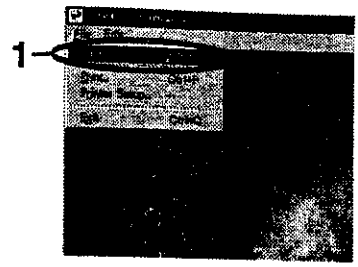
You can specify an area on a decoded picture and move that area to another software programme. You can specify an area on a decoded picture and move that area to another software programme (that is capable of handling bitmap data).

The other software programme needs to be running before you do this.

1 **Select the desired area on the decoded picture.**
- Specify the desired area using the mouse pointer. To select the entire picture, choose [Select All] from [Edit].

2 **Drag the selected area to the other software programme while holding down the [Ctrl] key.**

3 **Drop it in the software programme.**
- The selected area of the picture is moved to the other software programme. When this happens, the moved picture is automatically saved in a folder called"Object" which is at the level where the DV album is saved.



Saving a decoded picture

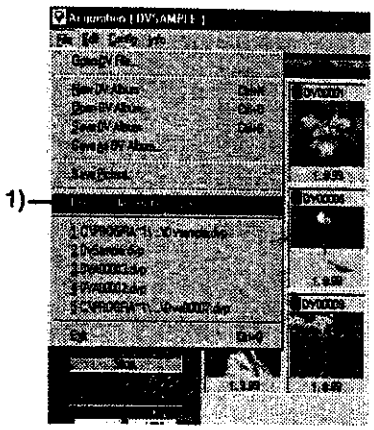
Use the procedure described below to save a decoded picture with a specified name, file path, and file format.

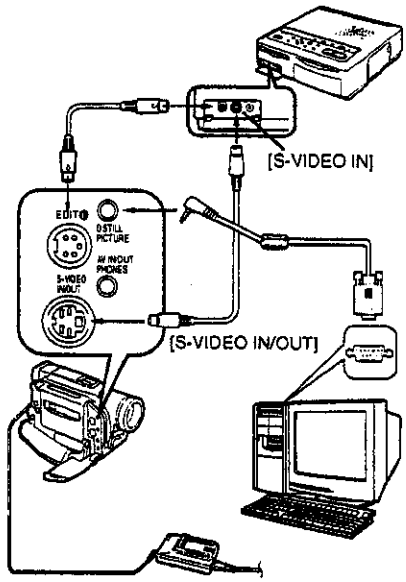
1 Select [Save] from [File].

- A dialogue box appears.

2 Specify the desired name, file path, and file format, then click [Save].

- Pictures may be saved as bitmap or JPEG files. If [JPEG File] is selected, a dialogue box appears, prompting you to specify the image quality. Specify a image quality and click [OK].

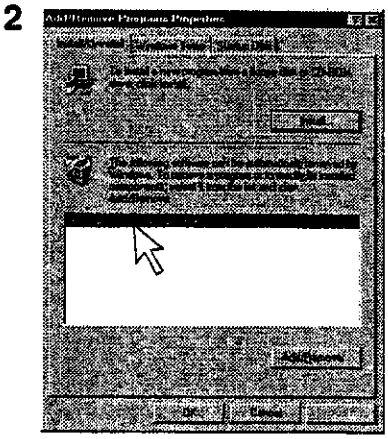




Using the video printer for printing

1) Selected pictures can be printed out using the video printer which has been connected using the system 5-pin Cable. If the movie camera is placed in the still playback mode, the picture concerned will be printed out even when nothing has been selected. For details on how to connect and operate the printer, read the Operating Instructions of the movie camera and printer carefully.

- The contents of albums cannot be printed out in the [multi] Mode.



Uninstalling DV STUDIO 2

Proceed as follows to uninstall the DV STUDIO 2 which has been installed in Windows® 95/98.

1 Double-click [My Computer] >> [Control Panel] >> [Add/Remove Programs] icon.

- The [Add/Remove Programs Properties] screen now appears.

2 Select [DV Studio2] on the list, and click [Add/Remove] button.

- The uninstallation of DV STUDIO 2 now starts.

3 Upon completion, click [OK].

DV STUDIO 2 for Acquisition menus

Some functions may not be available, depending on the movie camera model. (In such cases, the unavailable functions are grayed out and cannot be selected.)

■DV album menus

File menu [File]

1) **Opening a DV file [Open DV File]**
   - A DV file (*.dvf format) is added to the DV album which has been opened. Click here to open the dialogue box and select the DV file to be added.
2) **Creating a new DV album [New DV Album] (Ctrl+N)**
   - The DV album already displayed is closed, and a new DV album is created.
   When the DV album displayed is to be closed, a dialogue box asking whether it is to be saved appears. If the album is to be saved, click [Yes], if it is not to be saved, click [No], and if the creating of the new album is to be cancelled, click [Cancel]. When the album to be saved is a new file, the [Input DV Album Name] dialogue box appears. Input the name and click [OK]
3) **Opening a DV album [Open DV Album] (Ctrl+O)**
   - The DV album already displayed is closed, and the existing DV albums are displayed. When this function is clicked, a dialogue box for opening a DV album appears so select the DV album to be opened.
   When the DV album displayed is to be closed, a dialogue box asking whether it is to be saved appears. If the album is to be saved, click [Yes], if it is not to be saved, click [No]. To cancel opening a DV album, click [Cancel]. If the DV album to be saved is a new file, the [Input DV Album Name] dialogue box appears. Input the name and click [OK].
4) **Saving a DV album [Save DV Album] (Ctrl+S)**
   - The DV album now displayed is saved. If the album has not been saved even once, a dialogue box asking for the DV album name to be input appears. Input the DV album name (max. 8 characters), and click [OK]. To cancel the saving operation, click [Cancel].
5) **Saving as a newly created DV album [Save As DV Album]**
   - Used to save the currently displayed DV album under a different name or in a different location. A dialogue box appears, prompting you to enter the file path and new name. Enter this information, then click [OK].
6) **Saving a selected picture [Save Picture]**
   - Used to save a picture which is currently displayed in the DV album. A dialogue box appears, prompting you to specify the file path and file format. Enter this information and save the picture.
   Pictures may be saved as bitmap or JPEG files. If [JPEG File] is selected, a dialogue box appears, prompting you to specify the image quality. Specify a image quality and click [OK].
7) **Printing pictures [Print on Video Printer]**
   - Selected pictures can be printed out using the video printer which has been connected using the system 5 pin Cable. If the movie camera is placed in the still playback mode, the picture concerned will be printed out even when nothing has been selected.
   For details on how to connect and operate the printer, read the Operating Instructions of the movie camera and video printer carefully.
8) **Opening a recently used DV album [Recent File]**
   - Used to select a recently used DV album (the five most recently used DV albums are registered here). When the DV album displayed is to be closed, a dialogue box asking whether it is to be saved appears. If the album is to be saved, click [Yes]; if it is not to be saved, click [No]. To cancel opening a recent file, click [Cancel]. If the DV album to be saved is a new file, the [Input DV Album Name] dialogue box appears. Input the name and click [OK]. (The [Recent File] display will disappear if even one DV album is registered.)
9) **Closing a DV album [Exit] (Ctrl+Q)**
   - Used to close a DV album. When a new DV album or existing DV album which has been changed is to be closed, a dialogue box asking whether it is to be saved appears. If the album is to be saved, click [Yes], and if it is not to be saved, click [No]. When the DV album to be saved is a new file, the [Input DV Album Name] prompt appears. Input the name and click [OK]. To cancel exit, click [Cancel]. DV STUDIO 2 can also be exited by clicking [×] at the top right of the DV STUDIO 2 screen.

Edit menu [Edit]

1) **Undo [Undo] (Ctrl+Z)**
   - Used to cancel the last operation and restore the condition existing prior to that operation.
2) **Delete [Delete] (Ctrl+X)**
   - Used to delete the selected picture. The picture after the deleted picture now moves forward to fill the gap.
3) **Select all [Select All] (Ctrl+A)**
   - Used to select all the pictures.

Config menu [Config]

1) **Number of pictures on screen [Number of Pictures on Screen]**
   - Used to set the number of pictures to be displayed at the same time in a DV album. The default setting is 16.
2) **Acquire format [Acquire Format]**
   - Used to set the acquisition format for the still picture data. The default setting is full acquire mode.

   1 **[Full Acquire Mode]**
   - The digital still picture data is acquired in full size. It takes longer to acquire the data but the acquired data can be decoded without further ado.

   2 **[Fast Preview Mode]**
   - Only the fast preview data for the sole purpose of displaying small pictures together is acquired. The data is acquired quickly but it cannot be decoded immediately from this status. If decoding is selected in this status, the operation is automatically returned to acquiring the full acquire mode data.
   - This function cannot be used when the movie camera is in the Camera Mode.

3) **Auto acquire settings [Auto Acquire Settings]**
- Used to select the tape acquire position and search mode as the auto acquire settings. The default settings are [From here] for the acquire position and [Photoshot] for the search mode.

1 **[Acquire Position]**
- When [From here] is selected, auto acquire starts from the tape position at that moment. When [From Start Tape] is selected, the tape is rewound to the start, and then auto acquire starts. When [From Card Start] is selected, automatic acquisition begins from the first picture in the card (in Card Playback Mode).
- [From Start Tape] cannot be used when the movie camera is in the Camera Mode.

2 **[Search Mode]**
- When [Photoshot] is selected, only the photoshot still pictures on the tape are acquired. When [Interval Time] is selected, the pictures are acquired at the interval time setting.
- [Photoshot] cannot be used when the Digital Video Camera is in the Camera Mode.
- This function cannot be used when the Digital Video Camera is in the Card Playback Mode.

4) **Cut black side bars [Cut Black Side Bars]**
- Used to cut off non-picture areas (black borders). The areas to be cut on the top, bottom, and sides are specified as numbers of dots. Enter a correction value between 0 and 50.
The default settings are 12 dots for the sides, and 0 dots for the top and bottom. Usually these are the best settings.

5) **Smoothen picture contours [Still Picture Filter]**
- Used to select the method for smoothing the contours of acquired pictures. A dialogue box appears, prompting you to select a smoothing method. Select a method and click [OK]. (Select "Auto Field" to use the movie camera fields in the still picture. Select "Odd Field" to use the odd-numbered fields. Select "Even Field" to use the even-numbered fields.)

1 **[Fine Frame]**
- Used to detect movement between two fields in a frame and to smooth the picture to reduce blurring if there is movement. If there is little movement, the two fields are used and the frame resolution is maintained. Normally, this option should be used.

2 **[Standard Filter]**
- Creates a frame picture from a field picture during still playback.

3 **[No Filter]**
- Picture contour smoothing is not performed.

6) **Select the application in which to open the decoded picture. [Retouch Application]**
- Used to select which application to use to open a decoded picture. When the dialogue box appears, specify the path name for the application that you want to use. If no path is specified, the decoded picture is displayed in the DV STUDIO 2 window.

7) **Beep sound [Beep Sound]**
- Enable this option if you want a beep sound to occur when a button is pressed. Under the default setting, beep sounds are enabled.

8) **Communication [Communication]**
- Used to set the connection speed and to reconnect after communications have been interrupted. Normally, the automatic setting is usually acceptable but if an error occurs during picture acquisition, display the list box and change the setting to a slightly lower rate. If the movie camera is not connected when DV STUDIO 2 is started, only [Automatic] appears in the list box. If [Automatic] is selected after the movie camera and personal computer have been re-connected, the connection with the movie camera is checked, and communication with the movie camera is resumed.

Info menu [Info]

1) **Information about DV STUDIO 2 for Acquisition [About DV STUDIO2 for Acquisition]**
- This menu option displays information about the application you are using. Use this option to check the application version, etc.

Decoded picture menus

File menu [File]

1) **Save [Save] (Ctrl+S)**
- Used to save a picture. The first time you save a picture, a dialogue box is displayed, prompting you to specify the file path, file format, and file name. Enter this information and save the file. Pictures may be saved as bitmap or JPEG files. If [JPEG File] is selected, a dialogue box appears, prompting you to specify the image quality. Specify a image quality and click [OK].

2) **Print [Print] (Ctrl+P)**
- Used to print out the pictures on the printer connected to the personal computer. For details on how to connect and operate the printer, read the Operating Instructions of the personal computer and the printer carefully.

3) **Printer setup [Printer Setup]**
- Used to set up the printer.

4) **Exit [Exit] (Ctrl+Q)**
- Used to exit the decoded picture display.

Edit menu [Edit]

1) **Undo [Undo] (Ctrl+Z)**
- Used to cancel the last operation and restore the condition existing prior to that operation.

2) **Copy [Copy] (Ctrl+C)**
- Used to copy decoded pictures onto the clipboard after the area where these pictures are to be copied to has been selected.

3) **Select all [Select All] (Ctrl+A)**
- Used to select all the pictures.

4) **Resize [Resize]**
- Used to change the display size of the pictures. If [Resize] is selected from the menu bar when a picture has been decoded, the menu for changing its overall size appears. The size is changed based on the size in which the picture was initially displayed.

■ Context menu options (accessed by right-clicking)

A context menu is displayed when you right-click a picture in a DV Album. This menu displays a variety of functions that can be used on the picture.

1) **Delete [Delete]**
   - Deletes the picture. (➔ 12)
2) **Decode [Decode]**
   - Displays the decoded picture using a DV STUDIO 2 window. (➔ 14)
3) **Edit [Edit]**
   - Displays the decoded picture in the application selected in [Retouch Application] (➔ 17) under [Config].
4) **Saving a picture [Save Picture]**
   - Saves the picture. (➔ 13)
5) **Searching for a picture [Search Picture]**
   - Searches for the location on the movie camera tape or Card from which the picture was acquired. (➔ 13)
6) **Changing a picture name [Change Picture Name]**
   - Changes the title displayed above the picture. (➔ 12)
7) **Change record information [Change Rec Information]**
   - Switches the date and time displayed beneath the picture. (➔ 12)
8) **Print [Print]**
   - Prints a picture.
9) **Print on Video Printer [Print on Video Printer]**
   - Prints a picture on the video printer. (➔ 15)

OTHERS

Sample data

The CD-ROM contains some sample data. You can combine them with the pictures you have shot to create some interesting works.

DV album data

The pictures acquired in the DV format have been recorded as DV albums.

First select "File" on DV STUDIO 2 for acquisition's menu bar and then "Open DV Album", and make the selection from the "DvSample" folder.

- The above data has been installed in the personal computer if "Typical" was selected for the type of installation.

List of data provided

The data listed below is contained in the English, German and French language version folders.

Setup: Applications
DVsample: DV album data

Precautions for use

- If a communication error occurs, re-establish the connection (➔ 17).

Message Display

An error message is sometimes displayed during still picture acquisition. Such error messages are generated because of the recording status of the tape or the communications status (between the movie camera and the personal computer). During automatic acquisition, click [YES] to continue with acquisition. If you are only acquiring one picture, click [OK] and then click [ACQUIRE] to re-acquire the picture.

Number of pictures per album

The number of pictures which can be acquired in a DV album is 99,999. This capacity, however, is subject to restrictions depending on the personal computer's remaining memory. Since no guarantees are given for data in excess of 99,999 pictures, keep the number of pictures acquired in a DV album to less than 99,999 wherever possible.

Format of pictures which can be saved

- Using a 24-bit format, pictures are saved in non-compressed bitmap files.
- JPEG files

DV format files

DV format files (*.dvf) created by DV STUDIO/DV STUDIO 2 can be used only with DV STUDIO/DV STUDIO 2.

Processing and Modifying Photos (PhotoImpression 2000)

(NV-DS28/38Aonly)

PhotoImpression 2000 can be installed in PC/AT compatible personal computers which can run Microsoft® Windows® 95/98/Me.

System Requirements:

- Pentium™-based PC or equivalent
- 290 MB required for the 6 languages (for install) 125 MB free hard disk space
- 32 MB RAM
- 16-bit (or higher) color display
- CD-ROM drive
- Mouse

- Note that operations are not guaranteed for all PCs providing the recommended environment.

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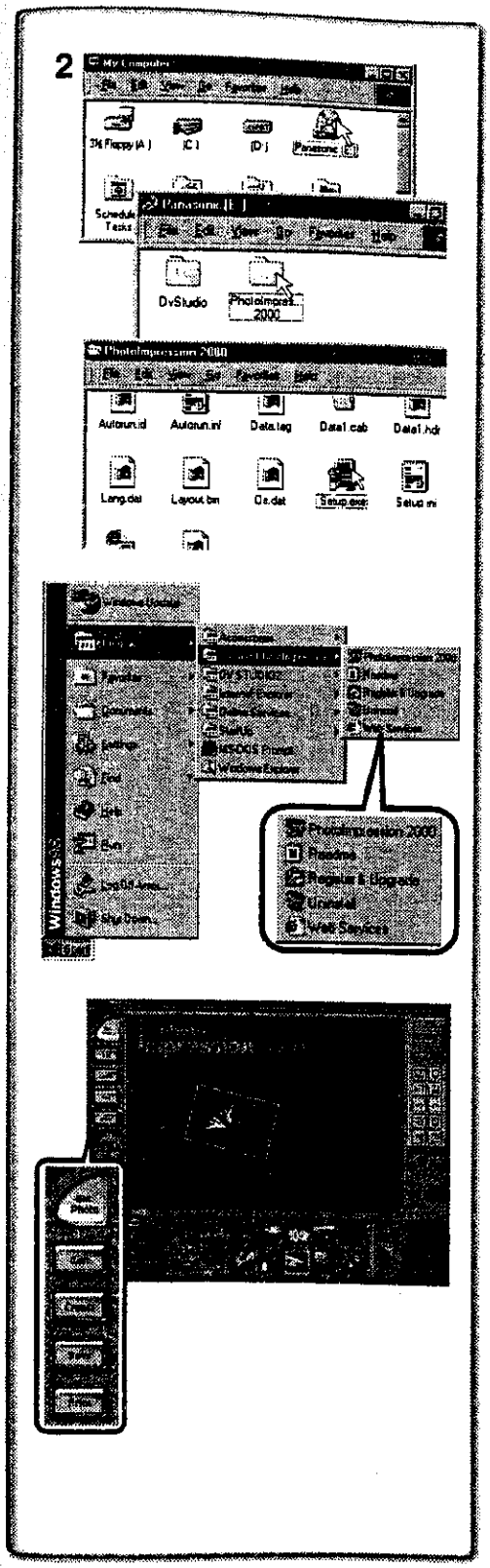


Installing PhotoImpression 2000

(NV-DS28/38A only)

1 Insert the supplied CD-ROM into the personal computer's CD-ROM drive.

2 Double-click the [My Computer] >> [Panasonic] >> [PhotoImpression 2000] >> [Setup] icon.

- The setup screen appears. Read the screen messages carefully, and complete the installation by following the on-screen instructions.

Using the PhotoImpression 2000

(NV-DS28/38A only)

The startup method differs depending on the type of personal computer used. Normally, select [Programs] → [ArcSoft PhotoImpression] → [PhotoImpression 2000] from the [Start] menu.

The PhotoImpression 2000 has 5 buttons for selecting the application's operations. For details on operation, refer to help.

Capture Mode [Get Photo]

Click the [Get Photo] button on the main screen. You can get your photos from your system, other devices attached to your computer, or even the internet.

Edit Mode [Edit]

To begin editing your photos, click the [Edit] button on the main menu screen. A variety of editing options are available.

Create Mode [Create]

PhotoImpression 2000 includes a variety of templates for creating everything from decorative borders to calenders. Select a category, select a template, click OK, and your photo will instantly be used in the template.

Save Mode [Save]

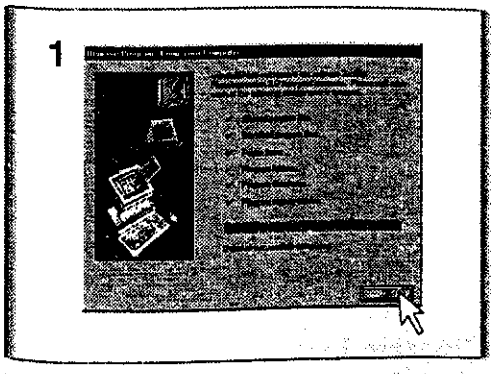
Press the [Save] button on the main screen to see the options for saving photos.

Print Mode [Print]

PhotoImpression 2000 support several printing methods to help you get the best results out of your computer.

- Depending on the type of printer used, it may not be possible to print out the pictures in the proper colours.

See the Help file supplied with your PhotoImpression 2000 software for information about this product.



Uninstalling PhotoImpression 2000

(NV-DS28/38A only)

The uninstalling method differs depending on the type of personal computer used. Normally, select [Programs] → [ArcSoft PhotoImpression] → [Uninstall] from the [Start] menu and click [Yes].

1 Upon completion, click [OK].

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